## Congress of the United States Washington, DC 20515

February 7, 2005

PART III IN A SERIES ON THE PROMISE OF STEM CELL RESEARCH

## Why Do We Need More Stem Cell Lines?

## LACK OF GENETIC DIVERSITY LIMITS APPLICATION AND SLOWS DISCOVERY

Dear Colleague,

One goal of embryonic stem cell research is to replace diseased cells with functioning ones created from stem cell lines -- for example, insulin secreting cells for diabetes or dopamine-producing nerve cells for Parkinson's disease. Since the recipients of these potentially life-saving therapies will come from diverse genetic backgrounds, it is essential that the stem cell lines also possess genetic diversity.

Yet, with only 22 embryonic stem cell lines available for federally funded research, the possibilities of studying, discovering and eventually applying therapies to a genetically diverse population is severely limited.

Genetic and biologic variation among human embryonic stem cell lines means that what we learn from one line may not apply to another. Scientists must be able to study many lines in order to make general conclusions, or to develop therapies for diseases. The federal stem cell policy must be expanded to allow federally funded research on genetically diverse stem cell lines.

We invite you to become an original cosponsor of the "Stem Cell Research Enhancement Act," so that the current policy is expanded to include genetically diverse stem cell lines that will open the benefits of research to all Americans. For more information or to cosponsor our legislation, please contact Elizabeth Wenk with Rep. Castle (5-4165) or Meghan Taira with Rep. DeGette (5-4431).

Sincerely,

DIANA DeGETTE Member of Congress MICHAEL CASTLE Member of Congress

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